Protecting the Poor from Macroeconomic Shocks: An Agenda for Action in a Crisis and Beyond

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1. INTRODUCTION

Macroeconomic crises vary in nature, causes and intensity. In this article we define a macroeconomic crisis as any episode characterized by either (a) a decline in gross national product (GNP) over the 12-month period from the onset of crisis; or (b) a doubling in the country's monthly rate of inflation to above 40% per annum at any point within that 12-month period; or (c) both. Very few economic 'normal' downturns in OECD economies would match those criteria. By contrast, many developing countries have experienced such crises over the last two decades.

In the 1980s, oil price rises, large scale international borrowing, and the debt crisis that followed, plunged many countries across the developing world into macroeconomic crises. And in the mid- and late 1990s — just as the memory of the debt crises was beginning to fade — a new spate of crises spread from Mexico (1995), through South East Asia (1997/8), Russia (1998), and returned to Latin America in Brazil (1999). No two crises are the same, but the crises of the 1980s and those of the 1990s did share some important features. They were preceded by large increases in the current account deficit, often accompanied by rising fiscal deficits. At some point, fear of default or devaluation prompts a cessation in the capital inflows financing those deficits (loans in the 1980s; portfolio flows in the 1990s).

A sharp contraction in capital inflows requires the country to reduce expenditures and to switch domestic demand towards non-tradables (and production towards tradables). Expenditure reduction is accomplished through contractionary fiscal and/or monetary policies, which lead to a recession. Expenditure switching is accomplished through a devaluation, which may have additional impacts on the level of aggregate demand. These impacts vary depending on the degree of exposure of the financial system (and corporate sector) to foreign-currency denominated loans, as well as on labor market rigidities that may slow the flow of productive resources across sectors. The combination of expenditure reduction and switching policies (which can be accomplished in many different ways) is the process of stabilization. The typical package of policy responses to the crisis also includes a number of microeconomic and structural reforms intended to raise the efficiency of resource allocation and the effectiveness of institutions (trade liberalization and privatization were key examples in the 1980s; financial sector reform and privatization are examples in the 1990s).

The specific policy responses to crises have varied considerably from country to country. But a few factors are, once again, common: one way or another, a real depreciation of the currency is achieved. One way or another, aggregate demand is reduced. And alas, one way or another, the living standards of many groups of people – almost invariably including the poorest – decline for some period of time. This article considers the impact of macroeconomic crises and of policy responses on the poor. The article makes four main points:

- Crises, and the subsequent policy responses, do not affect all households identically. Impacts vary across sector of employment, level of wealth, geographic location, gender, and according to various idiosyncratic factors.
- To protect the poor during a crisis, these impacts have to be taken into account. A comprehensive safety net will typically require more than one type of program. And it will need to adapt flexibly to differing household circumstances and potentially rapid changes over time.
- Whether policy responses that protect the poor can be chosen and implemented depends in part on the political situation in a country.
- Since it is often difficult to react at short notice during a crisis, a country's ability to protect the poor improves considerably if appropriate safety nets are set up before a crisis hits. This helps avoid providing too much assistance too late, as often happens. The safety net will be less active at normal times, and some components may well be dormant, though ready to come into action when needed. A permanent capacity to protect the poor requires a conscious effort, as periods of good performance often breed complacency.

The following section describes the main channels of impact on the poor of crises and the policies designed to respond to them. Building on this section, the rest of the article outlines an agenda for action. Section 3 discusses the importance of having a safety-net system in place before any crisis — a safety net that is capable both of dealing with normal demand and of responding adequately to the increased needs during crisis periods. Section 4 considers pro-poor policy responses once a crisis has begun. Section 5 concludes.

2. CHANNELS OF IMPACT

Crises, and the policy responses that follow them, have different impacts on different groups of people. The effects are not the same on farmers and construction workers; on people holding local currency assets and on people holding US dollars; on women and men; on the poor and on the rich; or on different ethnic groups. Some lose a lot, some lose less, some gain. Even if the poor do not systematically lose proportionately more than other groups — which is an open question, and varies from crisis to crisis, from country to country[1] — there are good reasons to be more concerned with the effect on the poor: one baht or rouble lost to someone hardly able to afford food and basic shelter has a more dramatic effect on welfare than the same amount lost to a rich compatriot.

When a macroeconomic crisis hits, there are several channels through which its impacts are felt by households (Ferreira and Keely, 1999; Lustig and Walton, 1998). These can be traced to the different sources of household income — wages, salaries, and self-employment incomes; returns on physical assets; and the receipt of public transfers — and to the prices a household faces when purchasing goods and services. There are also effects at the level of the broader community, which matter in turn to individual welfare. To focus the mind, we group these various effects into five (overlapping) channels:

1. Relative price changes. Shocks (such as an exchange rate depreciation or commodity price changes) and policies (such as trade reforms, public sector price increases, and tax/subsidy changes) affect relative prices. These price changes alter the profitability of each sector, and affect relative wages and employment levels. The relative prices of consumer goods also change with a further effect on real incomes. Strong predictions are possible in some special cases. For example, a real devaluation (such as one induced by a fiscal contraction) implies that the prices of the goods that are traded must rise relative to those of non-traded goods. If the poor are net suppliers of traded (non-traded) goods, or tend to work in industries producing them, then they will gain (lose) from the fiscal contraction via the change in relative prices. However, the story in reality is complicated by a variety of factors, including impediments to labor mobility, price stickiness, effects on the structure of consumer prices, and direct welfare effects on the poor of the spending cuts (Lipton and Ravallion, section 5.3).

In East Asia, the prices of imported goods increased dramatically following exchange rate devaluations. Price increases for food hurt those households that are net consumers of food — especially the urban poor and poor farmers whose food stocks and production went down due to the El Niño drought. Evidence for Sub-Saharan Africa suggests that the real devaluations of the late 1980s and early 1990s benefited the large numbers of the rural poor who were net producers of tradables (Sahn et. al, 1997).

2. Changes in labor demand. An important short-run impact on households is via reduced labor demand. This follows from contractionary policies which reduce aggregate demand for goods and services, thus impacting factor demand. The adjustment can be through quantities: layoffs; reduced working hours; increased unemployment and informal self-employment; or through prices: lower wages for wage earners and lower earnings due to reduced demand for the products of rural or urban enterprises. These shocks have different impacts on workers with different skills and different levels of job security. Low-skill workers and women are often more likely to lose formal-sector jobs and move into the informal sector, where earnings are likely to decline.

A corollary of the importance of the effects of declines in aggregate demand on the welfare of the poor — through labor markets — is that rapid recovery is likely to be crucial in mitigating the negative impact of a crisis. See, for example, Morley (1995) on the evidence for Latin America in the 1980s.

In both Brazil and Mexico, for example, informal sector employment swelled and earnings declined during the recessions of the early 1980s. In Brazil, employment in the informal sector increased by 30 percent during 1981-83, while the ratio of informal to formal sector wages decreased by 7 percent. In Mexico, informal sector employment grew 9.5 percent a year between 1983 and 1988 (World Bank, 1995); the formal sector also suffered from the shock: during the recent Mexican recession, formal sector wages declined almost as far as informal wages.

In Cote d'Ivoire, the adjustment program which began in 1980 was accompanied by massive layoffs in the formal private sector and in the public sector — formal sector employment decreased by 36 percent between 1980 and 1985 — with unskilled and young workers taking the brunt of the layoffs (Bourguignon and Morrisson, 1992).

In East Asia, unemployment increased significantly — in Thailand from 2.1 percent in February 1997 to 5.3 percent in May 1998; and from around 2 percent up to July 1997 to about 8 percent in February 1999 in Korea. In Indonesia and Malaysia most of the adjustment appears to have taken place through falling wages and the movement of workers into low-paying informal sector jobs (Manuelyan Atinc and Walton, 1998).

3. Returns on physical assets and capital gains or losses. Changes in interest rates and bond prices, stock market crashes, falling real estate prices, and inflation all affect the incomes of people who own these various types of assets. While changes in the relative short-term returns to holding bonds versus stocks may redistribute income only among the non-poor, there is one major asset-type impact which affects the poor: inflation. The rate of inflation is a tax on money holdings. Because there are barriers to entry in most markets for non-money financial assets, the poor are constrained in their ability to adjust their portfolio to rises in inflation. Typically, they will hold a greater proportion of their wealth in cash during inflationary episodes than do the non-poor.

The non-poor are generally better able to protect their living standards from inflationary shocks than the poor. Since Independence, inflationary periods in India have resulted in temporarily higher poverty incidence, depth and severity (Datt and Ravallion, 1998). For Brazil, inflation has been an important macroeconomic force driving the observed increase in inequality during the 1980s; the effect of inflation, controlling for unemployment, was to reduce the income share of the lowest eight deciles and to increase the share of the top two deciles (Ferreira and Litchfield, 1998). Blejer and Guerrero (1990) reach a similar conclusion for the Philippines for the period 1980-1986. Easterly and Fischer (1999) present evidence from a variety of sources (including subjective assessments of the importance of inflation) indicating that inflation matters more to the poor than the rich, who are presumably in a better position to protect their living standards.

4. Public transfers. Public expenditure cuts, beyond causing declines in labor demand and price effects (for example, when subsidies are removed), affect cash transfers and the provision of in-kind services. Especially if they take place across the board or are ad-hoc, these cuts tend to harm those who rely on public services, often including the poor. Doubtful inferences have often been drawn from benefit incidence studies showing that the poor share relatively little in the average benefits from social spending. Yet the marginal gains and losses from fiscal contraction can readily yield a very different picture (Lanjouw and Ravallion, 1999, using data for India). In Chile, per capita social spending fell by 20 percent between 1981 and 1986. The poorest 40 percent of families were particularly hard hit: their share of personal income was only 12 percent but they received 50 percent of public spending in health and education and 20 percent of social security payments (Bourguignon and Morrisson, 1992).

5. Community environment effects. Impacts are felt not just by individual households, but by whole communities, as traditional ties and networks and other forms of social capital are disrupted because of economic hardship, migration, and the emergence of fault lines between different ethnic, religious, or racial groups. There is evidence from several countries that social capital can be damaged during crises. Religious and ethnic tensions and riots in Indonesia are one example. In a different context, there is evidence from participatory poverty assessments that economic hardship has severely eroded family and community ties in the countries of the former Soviet Union.

As incomes fall and poverty and unemployment rise, crime and other types of violence – including domestic violence – tend to become more pervasive.[2] Similarly, cuts in public expenditure on sanitation, garbage collection and other services can lead to a deterioration in hygiene and public health conditions in poor neighborhoods. A number of cholera outbreaks in Latin America in the 1980s was widely linked to worsening public health conditions in the wake of stringent budgetary austerity.

Households respond to these shocks in various ways. Consumption patterns change in response to price changes. Production levels change across sectors. Employment patterns change: children are pulled out of school and sent to work; people turn to informal sector jobs. In some cases, poor women increase their labor force participation in response to a decline in the income of the main household earner. (See Beyer, 1995, for some evidence of this in Chile, during the 1993/4 slowdown.) Individuals and families migrate. Savings and other assets are tapped into, and so are forms of assistance available through family, kin, and communities.

Some of these responses have only short-term welfare effects, but some have more long-term and irreversible impacts. For example, both price effects and the reduction in access to public health and education may severely limit the ability of the poor to accumulate human capital, which in turn may have irreversible effects on long-term productivity. Reducing the nutritional intake of babies or pulling children out of school can have permanent effects on their future learning and income-earning abilities; malnourished mothers are more likely to give birth to low-birth-weight children, who in turn are more likely to suffer from poor health. Distress sales of productive assets can readily affect the ability of households to resume productive activities after the crisis. Responses such as these — though perfectly rational given the constraints facing the poor — can have long-term effects and may well reinforce existing inequalities, thus creating persistent poverty (Ferreira, 1995).

Evidence from rapid social assessments conducted in Thailand, the Philippines, Indonesia, and Cambodia, and surveys in Korea, Indonesia and Thailand confirm that the poor are indeed responding in ways which will affect their long-term well-being: youngsters are being taken out of secondary school and sent to work; health care is delayed or forgone, with increased risks of epidemics of communicable diseases; malnutrition is spreading; and productive assets are being sold.[3] There is also anecdotal evidence of reverse migration from the cities to the countryside.

The ability of the poor to participate in the recovery can be severely hampered by these rational short-term responses to a crisis. Evidence from Latin America indicates that the effects of the mid-1980s crisis on poverty were sharp. In some cases, the losses were not quickly reversed with the resumption of growth because inequality was also increasing. In Mexico, the acquisition of education was dampened both by a reduction in the rate of enrollment of first entrants in primary school and by a smaller share of people continuing on to higher levels of schooling. This may explain why in the mid-1990s average years of schooling of households heads were lower for all deciles up to the seventh than those of 1984, and why inequalities in earnings persisted (Lustig, 1995).

3. BETTER SAFE THAN SORRY: PREPARING FOR CRISES

Economy-wide or localized crises will always be with us. Responses that protect the poor will be easier to design if more is understood about the distributional impacts of crises, and if mechanisms to protect the poor are built into long-term development strategies.

(a) Understanding distributional impacts

More work is needed to develop analytical approaches and gather empirical evidence on the distributional impacts of crises and adjustment, and on what causes households to move out of poverty or fall back into it. This topic is a substantial research challenge for the future.

The main class of analytical instruments used for this kind of analysis so far has been applied and computable general equilibrium (CGE) models. These models describe the structure of an economy on both the production and the consumption sides, often distinguishing between socioeconomic groups, and generating estimates of the impacts of shocks and policy responses.[4] The findings are often very sensitive to the assumptions underlying the models, so their reliability as a guide for policy decisions is not uncontroversial.

Another, explicitly partial-equilibrium but substantially more transparent approach is to endogenize a small set of key factor prices — notably real wage rates — by modeling their relationship with other prices directly affected by the shock and/or policy response. Using time series data on the chosen variables, one can predict the impact of contemporaneous price changes on wages. For instance, Ravallion (1990) uses time series data on wages and prices in Bangladesh to predict real wage changes induced by external trade liberalization, and combines this with cross-section household survey data so as to estimate the first-order welfare impacts at various levels of living.

There is now a range of regression-based micro-simulation tools that offer an alternative to CGEs in evaluating the effect of policy responses. Earnings and labor force participation equations (at a minimum) can be estimated for various sectors, on unit-record household survey data supplemented by time series data when available. An investigation of how previous crises (or those in other countries) have affected parameters in these equations is used to suggest simulations that lead to different hypothetical distributions of income for different shocks and policy responses (Bourguignon et al., forthcoming). While this is a promising new research avenue, it is still in its infancy.

A pre-requisite for any of these approaches to provide useful insights is higher-quality and more timely information on transmission channels and household responses. Such information would have to come not just from standard household surveys but also from participatory studies, which can provide rapid feedback on the dynamics of poverty. Despite reasonably good overall poverty monitoring systems, the response in East Asia was hampered by the lack of short-term information on the impact of the crisis. Short- and long-term monitoring tools should be developed as part of a long-term development strategy.

(b) Setting up safety nets

Developing a better understanding of the distributional impacts of shocks and policy responses helps ensure that appropriate safety nets are in place to assist households in reducing or mitigating the risks they face.[5] Earlier crises in Latin America and the current experience in East Asia, as well as famines and natural disasters in Asia and elsewhere, offer two related lessons. Firstly, existing safety net mechanisms are too often inadequate. Their coverage is limited and leakage is high, or the assistance available is far below demand during a crisis; moreover, the poor are often unaware of the programs or have too little influence to obtain what they are entitled to.

Secondly, it is often difficult setting up effective safety nets during a crisis. Governments are often unprepared, ill informed and slow to take action; financial resources are not available, and human resources stretched. Building up the infrastructure and the capacity to manage a program takes time.

Without an adequate safety net in place *before* a crisis hits, the poor are likely to be hurt disproportionately. So setting up safety nets in good times may be the only effective way to protect the poor during lean times. Recent experience also calls for a re-examination of the distinction between "relief" programs and regular "development" programs. Before a crisis, good safety nets can provide the insurance necessary for (highly credit-constrained) households to make risky choices that increase their productivity and spur growth. Safety nets can help ensure that crises do not halt development — that essential household investments in health and education, which are crucial for both current welfare and future growth, are maintained, and that the poor do not divest from physical capital upon which their productivity depends to finance consumption. Thus, an effective safety net for the poor should be seen as a long-term investment.

An important objective of a safety net is to help insure the poor against the risk of income loss. The safety net is just one element of a comprehensive poverty reduction strategy. Other elements address achieving economic growth and investing in human capital; the comparative advantage of the safety nets is to provide *insurance*. The poor frequently rely on informal insurance mechanisms including strategies to reduce or diversify risk, but these characteristically entail high costs to longer-term prospects of escaping poverty. The key issue for policy is not whether publicly provided safety nets displace existing private mechanisms, but whether they provide insurance more efficiently and equitably; if they do, then displacement is desirable.

The safety net should respond flexibly to the needs of the poor, and not rely heavily on administrative discretion. If a safety net does not provide benefits to those who need them when a shock hits — for example, because it does not reach the intended beneficiaries, or because access is rationed — then it does not provide adequate insurance for the poor. On the other hand, it is quite possible, and perhaps desirable, that a well-designed safety net operates at substantially reduced levels during normal, non-crisis periods.[6]

The safety net should not provide unduly perverse incentives that would increase unemployment or other forms of dependency on public support in the long run. More generally, the safety net should be efficient, in that, at the margin, money spent on it should be as effective in raising the welfare of the poor as money spent on other programs. These principles do not necessarily mean the safety net must be finely targeted. Targeting is not as a rule costless, and so there can be no presumption that the most finely targeted safety net programs will have the largest impact on poverty for a given outlay.[7]

Experience in a number of countries helps identify a combination of programs that satisfy these principles and that have been effective in protecting the poor during crises: programs that provide employment for those who are able to work, along with transfers for those who cannot, or should not, work. There is also a case for special credit programs, though design issues are particularly important.

To mitigate the risk of loss of income, a key element of a public safety net is likely to be a *workfare program*. Past experience with workfare schemes suggests a number of guidelines for designing a cost-effective program (Ravallion, 1999a). The program would provide work on public infrastructure projects to people seeking employment. The work should ideally be available at all times, but naturally expands during times of crisis as demand expands — thus relying on administrative decisions less than other mechanisms. The projects would be proposed by local community groups, to ensure local relevance and ownership, and selected by a central agency. The central government should fund wage costs everywhere (possibly up to some limit of, say, 15-20 days a month) and non-wage costs in designated poor areas. Good models for this type of program are the Argentinean *Trabajar Program* for middle income countries and the *Employment Guarantee Scheme* in the state of Maharashtra in India for low-income countries.

A key to the success of such a workfare program is the wage rate. A relatively low wage rate ensures that only those in need apply, and that as many people as possible can be employed. A low wage also protects the incentive to take up regular work when available. The real wage should be set no higher than 90 percent (say) of the wage rate for unskilled agricultural work prevailing prior to the crisis. If the crisis causes the real wage rate for unskilled labor to fall temporarily, then the real workfare wage need not fall by as much as the market wage; this will help smooth the welfare impact. However, if the crisis is expected to entail a lower long run real wage rate, then the workfare wage will have to be based on an assessment of the sustainable unskilled wage. This may be difficult; erring on the side of offering too low a wage may be safer than setting too high a wage, as it is easier to increase the wage than to lower it. At the set wage, the aim should be that all those who are willing to work should find work; if there is not enough work for all, then the program would fail to provide a credible safety net.

A well designed workfare program will protect the poorest workers — those willing to accept low wages — against declines in labor demand and loss of income, thus mitigating the adverse social impact of the crisis.

To assure that those unable to work are covered, and to mitigate the risk of long-term negative effects of income losses, *targeted transfers* of cash or food would be provided to specific sub-groups of the poor, such as pregnant and lactating women or the elderly, or those who should not work, such as school-age children. These programs could be turned on and off, or expanded, based on indicators of crisis — and the demand for work in the workfare program could be used as such an indicator. There are a number of examples of schemes that use incentives to keep children in school. One such program is the *Bolsa Escola* scheme in Brazil, which offers a scholarship to families who send all their children to school. Another is the *Food for Education Program* in Bangladesh, which provides rice targeted to poor families (equivalent to one fifth of the child wage rate) provided their children attend

85% of classes. Other examples include the PROGRESA scheme in Mexico and PRAF in Honduras. Such targeted programs would, for example, mitigate the impacts of increases in the cost of education and prevent long-term losses in educational attainment and earning potential.

To assist in the recovery after a crisis, a program of carefully targeted micro-credit and savings services can help poor people preserve or re-acquire productive capital, once opportunities appear. During a crisis, such a program may help mitigate the risk of permanent losses in income-earning capacity by avoiding distress sales of productive assets. However, care must be taken to ensure that any credit programs are well-targeted and used for re-capitalization, rather than as alternatives to cash transfers. Grants are often needed instead of loans, and program administrators should ensure that clients understand the nature of the assistance received. While there are concerns about the effectiveness and sustainability of micro-finance schemes, models of successful schemes exist — for example *Grameen* and *BRAC* in Bangladesh (Khandker, 1998).

All of these programs would be permanent, dealing with issues of transient poverty, localized shocks, and poor-area development in normal years, but would expand during times of crisis to assist those temporarily in need. The budgetary outlay for such a set of programs may be higher than most countries currently spend, but possibly lower than the cost of hastily prepared relief operations set up after a crisis. In Indonesia, the cost of setting up a workfare program which would transfer enough income to the poor to restore pre-crisis (1996) consumption levels has been estimated at 3.5-5 percent of budgetary outlays (Manuelyan Atinc and Walton, 1998). Such amounts would probably be sufficient to fund programs such as those described above. To ensure that resources are available in the case of a nation-wide crisis, a fund could be set up with regular payments to accumulate resources for crises during normal years.

4. A CRISIS HAS STARTED; WHAT SHOULD BE DONE?

Concern for the poor should guide the choice of responses right from the start. Distributional concerns have to be taken into account in the design of policy responses including both the basic elements of a stabilization program, and the micro-level interventions implemented of the reform program. Appropriate policies can help mitigate the impacts of a crisis on the poor by preventing or dampening changes in the key variables that negatively affect household incomes — prices, labor earnings, returns to assets, public services. The case for a policy change is strong when the adverse welfare impacts arise from the initial shocks. When, instead, the adverse welfare impacts are the result of a package of policy responses (such as the elimination of a food subsidy as part of a general rationalization of public finances), one has to be more careful. Some policies that increase overall economic efficiency, and may lead to future growth with positive long-term effects on the poor, may nevertheless imply short-term income losses for them. In these cases, wherever fiscally possible, the aim should be to compensate for the change through a less distortionary, and possibly temporary, instrument, rather than to prevent the efficiency-enhancing policy from being implemented. One recent example is the ‘bono solidaris" scheme in Ecuador, which aims to compensate the poor for losses associated with the elimination of gas and electricity subsidies.

Policy can also help by identifying behavioral responses by households that can have negative long-term impacts, and countering the perverse incentives that lead to them. For example, where falling demand for adult labor raises the opportunity cost of keeping children in school, the introduction of the aforementioned transfer schemes contingent on school attendance can effectively reduce the incentives for a household response with detrimental long-term effects.

An agenda for a poverty-focused response to a crisis should include the following actions:

- *Choose macroeconomic stabilization policies that achieve their macroeconomic objectives at the least cost to the most vulnerable.*

Macroeconomic policy has an important role to play in re-igniting growth and thereby reducing poverty. It is important to recognize that a country can not live beyond its means, and that, in a typical crisis situation such as those with which this article has been concerned, some expenditure reduction and switching must take place to reduce the current account deficit to levels which the rest of the world is willing to finance. This is the fundamental objective of macroeconomic stabilization policies, and it is unhelpful to attempt to "defend" the poor by blocking them. In general, some temporary reduction in aggregate demand is inevitable in these situations.

However, as soon as a sustainable external balance has been reached and inflation pressures are contained, macroeconomic policy should be eased. Reducing interest rates and restoring efficient public spending as soon as this is sustainable can help offset the worst effects of recession on the poor.

As we have seen, contractions in aggregate demand can have a particularly severe effect on the poor, largely by reducing demand for their main asset: labor. Devaluations are more ambiguous. They are reported to have had a generally pro-rural-poor impact in Africa in the 1980s, because they raised the competitiveness of the tradable sector (Sahn et. al., 1997). Similarly, devaluations benefited net food and agricultural producers in East Asia. But there was also a separate effect on the aggregate level of economic activity. The recent devaluations in East Asia had contractionary consequences — stronger than those generally experienced in Africa, possibly because of their magnitude, and of the different level and structure of banking and corporate foreign exchange liabilities. The devaluations contributed to the collapse of banks and companies that held imperfectly hedged foreign-denominated debt, and thus to further declines in economic activity.

As the severity of the economic downturn in East Asia became apparent, the relaxation of fiscal policies emerged as the appropriate macroeconomic, and poverty-alleviation, response and became a key element of internationally supported adjustment programs in 1998 (notably in Korea, Indonesia and Thailand). A fiscal stimulus directed at labor-intensive activities such as rural roads or other rural employment programs can combine the benefits of growth with those of income support for poor groups. In choosing a combination of policies, policymakers should always try to avoid high inflation, as the poor often rely on fixed incomes and hold money balances.

- *Ensure that fiscal adjustment protects the items of spending most important for the poor, and that services are provided by effective, inclusive institutions.*

Fiscal policies that protect spending on basic education and health can prevent cuts in services which the poor use, and protect their ability to build up human capital. The elimination of unproductive expenditures may help keep social spending at its pre-crisis levels. In education, expenditures on primary schools, and on non-salary items, which are essential for quality, should be maintained; targeted subsidies to reduce school drop-out rates among the poor (for example, feeding programs or scholarships tied to attendance) should also be increased. In health, spending for activities with high externalities, such as vaccinations and vector control, as well as spending for health care provision at the lower levels of the health system, should be maintained.

Beyond health and education, other public investments that affect the productivity of the poor — most notably, investments in *rural infrastructure, urban sanitation,* and the provision of *micro-finance* — should also be protected. Wherever possible, such price *subsidies* as are deemed consistent with microeconomic efficiency should be targeted to the poor. But experience from Latin America suggests that a crisis may not the best time to reform existing subsidies, as resistance from those hurt by the change may stop reforms.

For all public expenditures, especially those in the social sectors, it is important to assess institutional capacity for the provision of programs. No amount of public spending will benefit the poor if corruption is rampant or if delivery mechanisms exclude the poor.

- *Set up or reinforce safety nets capable of providing effective insurance before a crisis and assistance once a crisis hits.*

If programs exist that reach the poor and help them cope with the impact of the crisis, as we argued in section 3, then they should clearly be supported or expanded. In a short-run crisis situation, the focus should be on programs that deliver the services the poor need (for example, transfers to buy food), which reach the poor (even though they may reach some who are not poor), and which are already running and can be scaled up quickly. Examples of programs that may be scaled up the aforementioned public works schemes and other workfare programs, which can provide employment for the poor, and develop and maintain public assets in poor areas. Expanding unemployment assistance may be an option in countries where the institutional infrastructure for such a program is in place.

- *Set up interventions that help preserve the social fabric of societies in crisis and build social capital.*

There is evidence that at least some of the negative social impacts of a crisis — rising social tension and the breakdown in family and community ties — may persist after the end of the crisis. This was the case with violence in urban Latin America (Fajnzylber, Lederman, and Loayza, 1998). There is also growing anecdotal evidence that the cost of this higher level of violence, both in direct human terms and in terms of displaced or discouraged economic activity, can be quite high. It is important not to neglect this policy area, where best results may be achieved through partnerships with local NGOs and civil society organizations in general.

- *Set up mechanisms to provide information for monitoring the impact of the crisis and evaluating responses.*

Adequate and timely information on the impact of the crisis on various groups and areas helps design appropriate policy responses, and provides feedback on the impact of policies which allows for corrections if the desired impact does not materialize. Information can also play a crucial role in national and local politics of design and implementation. At a national level it is of great importance that well-informed debate on issues, impacts and alternatives be supported. Biased estimates of impact on the poor — in either direction — do not foster sound policy responses.[8] At a local level, provision of public information on intended public action — and the rights of potential beneficiaries — can help reduce leakages and corruption.

Sound program monitoring and evaluation is difficult at the best of times, but crises present extra problems. One cannot reasonably ask a government and society in the midst of a macroeconomic crises to wait for a baseline survey to be done prior to intervention; nor is randomization normally a politically feasible option in such settings. Nonetheless, there are still options for setting up rigorous impact evaluations in crises, such as by using propensity-score matching methods to draw the comparison group (to a sample of program participants) from a post-intervention survey of non-participants.[9] There is also scope for using standard project monitoring data for rapid evaluation purposes, such as by comparing the geographic distribution of program spending with a suitably fine pre-existing poverty map (Ravallion, 1999b).

Three final observations are relevant in thinking about how such an agenda would be implemented. First, institutional capacity constraints must be taken into account in the design of policy responses. The extreme cases of post-conflict situations where the state structure has broken down and there are few NGOs or other organizations capable of implementing programs pose a particular challenge. But even in more "normal" circumstances, a safety net program that works well in one setting may be far less effective in another, where administrative capacity is weak or financing is inadequate.

Second, action may have to be taken before sufficient information is available. There will usually be inadequate information on likely and actual effects, when the crisis begins. Nevertheless, those designing a response should simultaneously: (a) take immediate action based on both readily available analysis and general principles, and (b) set up a process of generation of information and diagnosis to inform future action. Often there will be greatest clarity on where to move in the public spending and crisis monitoring domains.

Third, in order to be chosen and implemented, policy packages that protect the poor need to have sufficient political support. If this is not present, such policies are unlikely to be implemented. Crises may be times of opportunity to implement policies that lead to positive and persistent distributional or social benefits, as they create a sense of urgency and a focus on the plight of the poorest, and as social unrest may threaten the fabric of society. Whether such opportunity can be seized will depend crucially both on the extent to which such reforms have been prepared prior to a crisis and on whether political dynamics allow governments or societal actors to support changes against previously entrenched interests.

5. CONCLUSIONS

Macroeconomic shocks can affect the welfare of poor households and communities through changes in relative prices, changes in aggregate labor demand (that can reduce employment levels and/or wage rates), changes in the rates of returns on assets (including the inflation tax), changes in public transfers (in cash and in kind); and changes in the community environment (be it in terms of public health or public safety). A number of these are painful short-term effects, which are serious enough in their own right. But some are also associated with undesirable long-term effects on poor people.

To minimize (short-run and long-run) negative effects on the poor, we proposed a two-part agenda for public action. The first part is about being prepared by having an effective and efficient public safety net in place before the crisis. Such a permanent safety net should be sufficiently flexible to adapt easily to changes in the level of demand for its services. In general, this will imply that its outlays will be automatically counter-cyclical. We suggested that the basic design of such a system would rely on three elements: a public employment guarantee or some such workfare scheme; a set of targeted transfers (in kind and in cash) to those who can not or should not work (such as pregnant or lactating women; the elderly; and school age children); and targeted micro-credit and savings schemes to provide the poor with access to capital and opportunities during and after the crisis.

The second part involves policies for dealing with a crisis that has already started. This entails choosing macroeconomic policies which return to overall counter-cyclicality as soon as sustainable internal and external macroeconomic balances are restored; managing fiscal expenditure reductions selectively so as to protect items of special importance to the poor; reinforcing safety nets to deal with the extra demand for support; initiatives aimed at preserving and rebuilding social capital in poor communities; and setting up adequate information, monitoring and evaluation systems.

There is clearly much yet to be done to protect the poor from macroeconomic shocks. There is a potentially important role here for the international development community, in keeping with the now broad consensus that fighting poverty should be the overarching objective of development assistance. Technical assistance in safety net design, monitoring and evaluation can help greatly. But it is evident that country incentives for sound policy making also matter. It has long been accepted (as a matter of principle at least) that the international community should not bail out countries that get into a macroeconomic crisis because of predictably bad macroeconomic policies. Yet it seems that much less attention is paid to the safety net policies that determine, in part, the welfare consequences of a macroeconomic crisis. Even a country with sound macroeconomic policies will face a severe external shock at one time or another. If that country's government is not ready to help those who suffer from the shock then it is unclear why the country should receive any more help from the international community than a government that adopts the wrong macroeconomic policies. Either way, the poor suffer from bad policy making.

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NOTES

[1] See, for example, the series of country studies discussed in Bourguignon et al. (1991).

[2] On the determinants of crime in general see Fajnzylber, Lederman, and Loayza (1998). Also see Moser (1997) on domestic violence in a community in Ecuador.

[3] For evidence on this see Robb (1999) and Poppele et al., (1999); primary school enrollment rates appear not to have declined during the crisis).

[4] Examples of studies using applied general equilibrium models to study the impacts of macroeconomic crises and policy responses on income distribution include Demery and Demery (1991), Thorbecke (1991) and Decaluwe et al., (1999).

[5] For an overview of specific policy alternatives see Drèze and Sen (1989) and Lipton and Ravallion (1995, section 6).

[6] We focus here on the insurance role of safety nets. The same transfer instruments discussed here can also be used for redistribution across persons at different welfare levels. See Klugman (1999) for further discussion of the redistribution roles of safety nets in developing and transitional economies.

[7] For a recent overview of the arguments and evidence on this point see van de Walle (1999).

[8] For example, while it is clear that many of Indonesia's poor suffered in the crisis of 1998, the methods used in some of the most widely quoted early estimates of the impact on the poverty rate almost certainly led to an overestimate of the adverse impact (for further discussion see Poppele et al., 1999).

[9] Jalan and Ravallion (1999) give an example, based on Argentina's *Trabajar Program*.